## **Voucher Sheet**

Taxon: *Photis* sp OC2 (Amphipoda: Photidae) Synonomy: possibly *Photis* sp B Gillingham Collected: OCSD, Winter Semi-Annual survey, Station 75, 6 March 2013, 54 m CLA-EMD, Station Z2, 01 Aug 2013, 60 m. **Examined by:** Dean Pasko **Date:** 15 October 2013 **Circulated:** 2/5/2014

## Literature:

Conlan, K.E. 1983. The amphipod superfamily Corophioidea in the northeastern Pacific region. 3. Family Isaeidae: systematics and distributional ecology. Natl. Mus. Nat. Sci. (Ottawa), Publ. Nat. 4: 1–75.

Conlan, K.E. 1994. New species of the amphipod crustacean genera *Photis* and *Gammaropsis* (Corophioidea: Isaeidae) from California. Amphipacifica 1 (3): 67–73.

Pasko, D. 1999. Key to the *Photis* (Amphipoda: Isaeidae) from Coastal Shelf Bottoms of the Southern California Bight. City of San Diego Marine Biology Laboratory. Unpublished.

## Characters (See Figures, page 2)

- Antenna 1, article 1 elongate (subequal to length of head), article 2 at least twice as long as article 1, article 3 subequal to article 1, with pairs of long setae (setae equal to length of antenna 1 flagellum articles).
- Coxa 1 directed forward, elongate, tapering distally, longer (deeper) than broad, approximately one-half the depth of coxa 2, setae sparse (5) and long. Coxa 2 elongate, narrow, broadly squared distally with 10 fairly widely spaced setae along ventral margin. Coxae 2 through 5 subequal in depth.
- Gnathopod 1 (Gn) basis bi-carinate along anterior margin, each distally produced; dactyl longer than palm; palm strongly excavate, setose, rounded hind margin, defined by strong medial spine; oblique row of long setae medially; anterior margin of carpus subequal to propodus, hind margin narrowed (one-third of anterior margin).
- Gn2 basis strongly produced distally along lateral margin, bearing stridulation ridges medially oblique; dactyl slightly shorter than palm, with distal spine-bearing notch but no tooth; palm produced into small, crenulate bump near hinge, with sinuous margin leading to small palmar tooth located about one-third from edge of palm, which is defined by change in angle, not a spine; propodus setose with rows of long setae medially (one just below dorsal margin, and one oblique row just above ventral margin); carpus with narrowed hind margin not produced along ventral margin of palm.
- Gills short, squarish in general shape.

## Similarities:

- These specimens seem to be most similar to *P. linearmanus* Conlan 1994 in sparsely setose coxa, oblique Gn2 palm without defining spine, and elongate propodus and dactyl of pereopods 3–5, but they are distinguished by the shorter coxa 1 and presence of larger palmar process on Gn2 (vs. small process in *P. linearmanus*).
- Keys to *P. macinerneyi* Conlan 1983 in Pasko (1999) but Gn2 palmar tooth is not proceeded by notch near the dactylar hinge between dactyl and tooth. In addition, the Gn2 palmar margin is different (not deeply excavate and smooth as in *P. macinerneyi*), and the antennae are long, with antenna 1 peduncle article 2 twice as long as article 1 (not subequal to as in *P. macinerneyi*).
- Keys to *P. vinogradovi* Gurjanova 1951 in Conlan (1983) but Gn2 dactyl is as long as palm, and the palm is without a defining tooth.
- Similar to *P. chiconola* J.L. Barnard 1964 but the Gn2 dactyl does not overlap palm strongly; Gn1 palm is strongly excavate (vs. weakly so in *P. chiconola*).
- Similar to *P. viuda* J.L. Barnard 1962 in general shape of Gn2 (see J.L. Barnard 1962, Fig 20), but Gn1 is strongly excavate and Gn2 is without a defining tooth.

**Note**: All male specimens (approximately 2.25 to 3.0 mm). Females unknown. Found in association with *Photis bifurcata*, *P. californica*, *P. lacia*, *P. linearmanus*, *Photis* sp C.



*Photis* sp OC2: (A) whole male specimen; (B) Gn1 (x100);(C) Gn1 detail of palm (x400);(D) Gn2 (x100); (E) Gn2 palm detail (x400).

